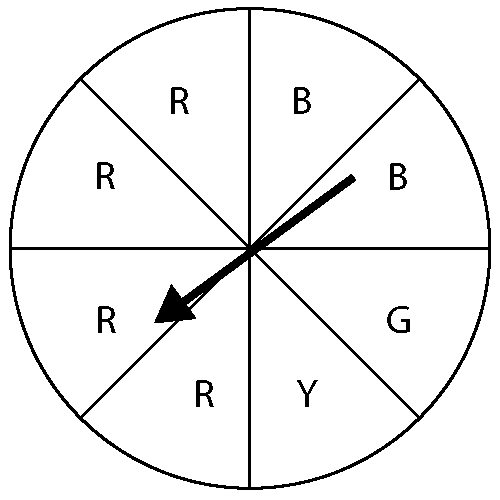
**6th Grade Checkpoint 6**

**Directions: Answer the following questions. Do the calculations on the test next to the questions.**

1. Suppose you spin the spinner once**.**

****

Find*P*(yellow or green)

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

2. Find the area of the circle to the nearest tenth.

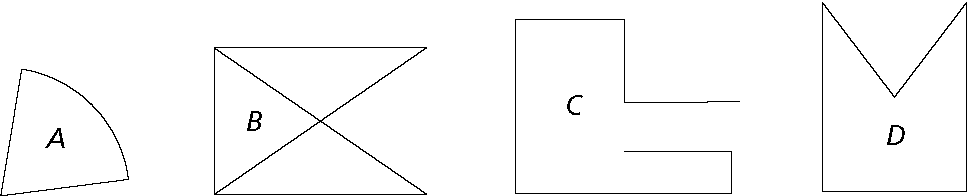


|  |  |
| --- | --- |
| a. | 1,809.6 cm2 |
| b. | 452.4 cm2 |
| c. | 37.7 cm2 |
| d. | 75.4 cm2 |

3. The Farwell girls’ softball team went out to the local pizza restaurant to celebrate their victory. The bill came to $72. What would be the amount of a 15% tip on this bill?

|  |  |
| --- | --- |
| a. | $7.20 |
| b. | $10.80 |
| c. | $9.00 |
| d. | $14.40 |

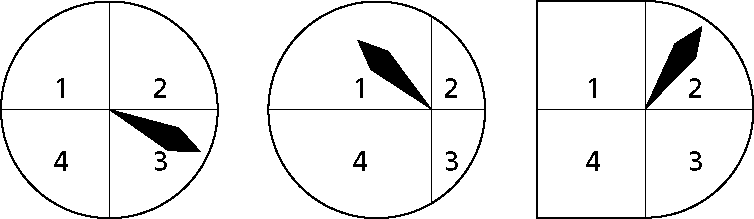
4. Which figure below is a polygon?



|  |  |
| --- | --- |
| a. | Figure A |
| b. | Figure B |
| c. | Figure C |
| d. | Figure D |

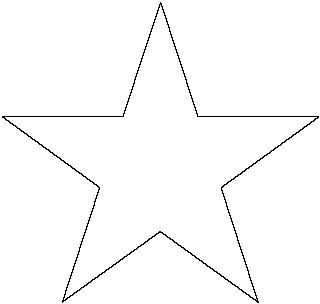
5. In which spinners below are the outcomes 1, 2, 3, and 4 equally likely?

Spinner A Spinner B Spinner C



|  |  |
| --- | --- |
| a. | Spinner A |
| b. | Spinner B |
| c. | Spinner C |
| d. | All 3 spinners |

6. Draw in the lines of symmetry



7. Use a protractor to draw an angle with measure 56°.

|  |  |  |  |
| --- | --- | --- | --- |
| a. |  | c. |  |
| b. |  | d. |  |

8. In a survey of 100 students about their favorite pizza topping, 25 chose pineapple. According to these results, if a student is picked at random at the school, what is the chance that the student prefers pineapple as a pizza topping?

|  |  |
| --- | --- |
| a. | 1 out of 5 |
| b. | 1 out of 4 |
| c. | 1 out of 2 |
| d. | 1 out of 6 |

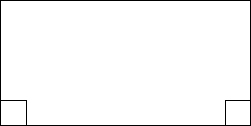
9. Find 70% of 48.

|  |  |
| --- | --- |
| a. | 32.6 |
| b. | 35.6 |
| c. | 33.6 |
| d. | 34.6 |

10. There is a jar with 20 red marbles and 1 blue marble. How likely is it that you will pick a blue marble?

|  |  |
| --- | --- |
| a. | Impossible |
| b. | Unlikely |
| c. | Likely |
| d. | Certain |

11. Which is not a name for this polygon?



|  |  |
| --- | --- |
| a. | Quadrilateral |
| b. | Parallelogram |
| c. | Rectangle |
| d. | Rhombus |

12. In the lunch line you can choose one item from each group.

Entrees: hamburger, chicken nuggets, or tacos

Side: carrots, or apple slices

Desert: cookie, brownie, or jello

List all the possible meals you could get from the lunch line

|  |
| --- |
|  |

What is the probability you will get hamburger, apple slices, and a brownie? \_\_\_\_\_\_\_\_\_\_\_\_\_

What is the probability you will get a meal with tacos or a cookie? \_\_\_\_\_\_\_\_\_\_\_

What is the probability you will get a tuna fish sandwich? \_\_\_\_\_\_\_\_\_\_\_\_

13. Classify the angle as *acute*, *right*, *obtuse*, or *straight*.

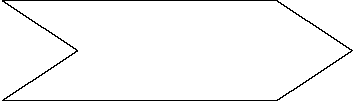
The measure of angle *A* is 146°.

|  |  |
| --- | --- |
| a. | Obtuse |
| b. | Right |
| c. | Straight |
| d. | acute |

14. Find the circumference of the circle with the given radius or diameter. Round to the nearest unit.

|  |  |
| --- | --- |
| a. | 53 cm |
| b. | 227 cm |
| c. | 20 cm |
| d. | 27 cm |

15. Name the polygon below.



|  |  |
| --- | --- |
| a. | Quadrilateral |
| b. | Hexagon |
| c. | Pentagon |
| d. | Octagon |

16. A lawn trimmer is on sale for 45% off. The sale price is $195.25. What was the original price?

|  |  |
| --- | --- |
| a. | $365 |
| b. | $240.25 |
| c. | $370 |
| d. | $355 |

**6th Grade Checkpoint 6**

**Answer Section**

**MULTIPLE CHOICE**

1. ANS: A PTS: 1 DIF: L2

REF: How Likely Is It? | Skills Practice Investigation 2

OBJ: Investigation 2: Experimental and Theoretical Probability NAT: NAEP D4d| NAEP D4e| NAEP D4f

STA: 6CO 3.6 TOP: Problem 2.2 Exploring Probabilities

KEY: event | probability

2. ANS: B PTS: 1 DIF: L1

REF: Covering and Surrounding | Skills Practice Investigation 5

OBJ: Investigation 5: Measuring Irregular Shapes and Circles

NAT: NAEP M1b| NAEP M1C| NAEP M1g STA: 6CO 4.5| 6CO 5.1| 6CO 5.5

TOP: Problem 5.3 Exploring Area and Circumference KEY: area | circle | diameter | radius

3. ANS: B PTS: 1 DIF: L2 REF: Bits and Pieces III | Multiple Choice

OBJ: Investigation 4: Using Percents NAT: NAEP N3a| NAEP N3g| NAEP N4d

STA: 6CO 1.4| 6CO 6.2| 6CO 6.3| 6CO 6.4 TOP: Problem 4.2 Computing Tips

KEY: finding tips | multiply decimals

4. ANS: D PTS: 1 DIF: L2

REF: Shapes and Designs | Multiple Choice OBJ: Investigation 1: Bees and Polygons

NAT: NAEP G1b| NAEP G1c| NAEP G1d| NAEP G2a| NAEP G2d

STA: 6CO 4.2 TOP: Problem 1.1 Classifying Polygons

KEY: polygon | vertex | line segment | equilateral triangle | isosceles triangle | scalene triangle | rectangle | square | parallelogram

5. ANS: A PTS: 1

6. ANS: A PTS: 1

7. ANS: B PTS: 1 DIF: L1 REF: Skills Practice Investigation 2

OBJ: Investigation 2: Polygons and Angles

NAT: NAEP M1c| NAEP M1g| NAEP M2e| NAEP G3g| NAEP A2c

TOP: Problem 2.1 Understanding Angles | Problem 2.2 Developing Angle Benchmarks | Problem 2.3 Measuring Angles KEY: angle | protractor

8. ANS: B PTS: 1 DIF: L2 REF: How Likely Is It? | Multiple Choice

OBJ: Investigation 2: Experimental and Theoretical Probability NAT: NAEP D4d| NAEP D4e| NAEP D4f

STA: 6CO 3.6 TOP: Problem 2.2 Exploring Probabilities

KEY: survey | outcome | equally likely

9. ANS: C PTS: 1 DIF: L1

REF: Bits and Pieces III | Skills Practice Investigation 4 OBJ: Investigation 4: Using Percents

NAT: NAEP N3a| NAEP N3g| NAEP N4d STA: 6CO 1.4| 6CO 6.4

TOP: Problem 4.1 Determining Tax

KEY: percent | finding the part | percents greater than 100 or less than 1

10. ANS: B PTS: 1

11. ANS: D PTS: 1 DIF: L2

REF: Shapes and Designs | Multiple Choice OBJ: Investigation 1: Bees and Polygons

NAT: NAEP G1b| NAEP G1c| NAEP G1d| NAEP G2a| NAEP G2d

STA: 6CO 4.2 TOP: Problem 1.1 Classifying Polygons

KEY: polygon | vertex | line segment | equilateral triangle | isosceles triangle | scalene triangle | rectangle | square | parallelogram

12. ANS: A PTS: 1

13. ANS: A PTS: 1 DIF: L1 REF: Skills Practice Investigation 2

OBJ: Investigation 2: Polygons and Angles

NAT: NAEP M1c| NAEP M1g| NAEP M2e| NAEP G3g| NAEP A2c

STA: 6CO 4.1| 6CO 4.4| 6CO 5.1| 6CO 5.3

TOP: Problem 2.1 Understanding Angles | Problem 2.2 Developing Angle Benchmarks | Problem 2.3 Measuring Angles KEY: angle | right angle | straight angle | obtuse angle | acute angle | classifying an angle

14. ANS: A PTS: 1 DIF: L1

REF: Covering and Surrounding | Skills Practice Investigation 5

OBJ: Investigation 5: Measuring Irregular Shapes and Circles

NAT: NAEP M1b| NAEP M1C| NAEP M1g STA: 6CO 4.5| 6CO 5.1| 6CO 5.5

TOP: Problem 5.2 Finding Circumference

KEY: circle | radius | diameter | circumference

15. ANS: B PTS: 1 DIF: L2

REF: Shapes and Designs | Multiple Choice OBJ: Investigation 1: Bees and Polygons

NAT: NAEP G1b| NAEP G1c| NAEP G1d| NAEP G2a| NAEP G2d

STA: 6CO 4.2 TOP: Problem 1.1 Classifying Polygons

KEY: polygon | vertex | line segment | equilateral triangle | isosceles triangle | scalene triangle | rectangle | square | parallelogram

16. ANS: D PTS: 1 DIF: L2

REF: Bits and Pieces III | Skills Practice Investigation 4 OBJ: Investigation 4: Using Percents

NAT: NAEP N3a| NAEP N3g| NAEP N4d STA: 6CO 1.4| 6CO 6.4

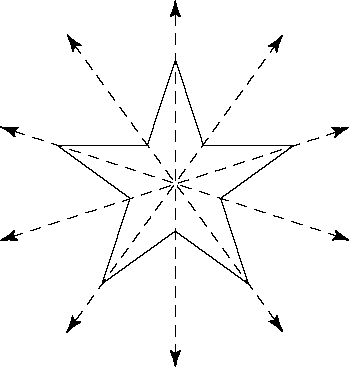
TOP: Problem 4.1 Determining Tax

KEY: write an equation | solving problems by writing equations | problem solving | algebra | word problem | determining tax

**SHORT ANSWER**

17. ANS:

**a.**



**b.** It also has five turn symmetries, specifically 72º, 144º, 216º, 288º, and 360º.

Note: It is not necessary for students to give the specific degrees of rotation symmetry.

PTS: 1 DIF: L2 REF: Shapes and Designs Unit Test

OBJ: Investigation 1: Bees and Polygons

NAT: NAEP G1b| NAEP G1c| NAEP G1d| NAEP G2a| NAEP G2d

STA: 6CO 4.2| 6CO 4.6 TOP: Problem 1.2 Symmetry

KEY: reflection symmetry | line of symmetry | rotation symmetry

18. ANS:

a

PTS: 1